UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
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JAN 1 1 2016

Sharri Bender Ehlert, District Director
California Department of Transportation, District 6
855 M Street, Suite 200
Fresno, CA 93721

Subject: Comments on the Final Environmental Impact Statement for the Centennial Corridor Project, Kern County, California (CEQ#20150348)

Dear Ms. Ehlert:

The U.S. Environmental Protection Agency (EPA) has reviewed the Final Environmental Impact Statement (EIS) for the Centennial Corridor Project in Bakersfield, CA, pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act.

EPA reviewed the Draft EIS and provided a written comment letter (July 8, 2014) that identified our rating for this project as *Environmental Objections- Inadequate Information (EO-3)* based upon the anticipated potential localized air quality impacts and lack of information important for analyzing and mitigating the project's potentially significant impacts on air quality. EPA also provided a written comment letter (June 10, 2015) following our review of an Administrative Draft of the Final EIS. EPA appreciates the opportunity to review an earlier draft of the Final EIS and we appreciate the ongoing coordination to address EPA's concerns. EPA acknowledges the additional information for air quality, environmental justice, noise, and relocation impacts provided in the Final EIS. We appreciate that Caltrans negotiated a Voluntary Emissions Reduction Agreement with the San Joaquin Valley Air Pollution Control District to reduce air quality impacts and note the specific commitments to address community cohesion impacts. Through this letter, we also provide recommendations for Caltrans to consider for future projects when analyzing Children's Health impacts and Mobile Source Air Toxics.

Voluntary Emissions Reduction Agreement

EPA recognizes Caltrans' successful negotiation of additional air quality improvements with the San Joaquin Valley Air Pollution Control District through the Voluntary Emissions Reduction Agreement. EPA believes that proposed voluntary programs in the agreement, including school bus diesel retrofits, heating, venting, and air conditioning (HVAC) upgrades to qualified schools, and wood-burning stove replacements with cleaner-burning fuels in proximity to the project, would be a significant and positive step forward in mitigating localized emissions increases of PM2.5. Caltrans' commitment to upgrade HVAC systems at qualified schools may improve environmental health outcomes for sensitive receptors in some of the seventeen schools, preschools, and daycare facilities identified in the Final EIS. In addition, Caltrans' commitment to focus air quality improvement projects in areas adjacent to the Alternative B alignment may extend direct relief to neighboring communities with environmental justice concerns.

Recommendation:
In the ROD, describe any additional information known about the timing and implementation of the VERA as it relates to the timing of the construction and operation of the proposed project.

Community Cohesion

The Final EIS indicates that Caltrans will construct all proposed crossings, including the proposed La Mirada Drive overcrossing, and will work with the city to install a dedicated pedestrian sidewalk for the benefit of residents living south of La Mirada Drive and Joseph Drive. These measures not only repair historic socioeconomic and demographic separation of community resources, but may also mitigate many of the adverse effects to community cohesion identified in the Final EIS for Southwest Bakersfield and the Westpark neighborhoods. These efforts will contribute to protecting access to community resources such as Centennial Park and Harris Elementary school by providing active transportation and enhancing livability. The Final EIS also identifies a commitment to provide a grant of $200,000 to promote planting of trees. We understand the highest priority for allocation of these funds will first be given to communities with environmental justice concerns within 1000 feet of the Alternative B alignment, followed by other properties adjacent to the alignment.

Recommendation:
In the ROD, clearly state the community cohesion efforts that Caltrans will implement during construction and operation of the project.

Children's Health Impacts

As noted in our June 2015 comments on the Administrative Draft of the Final EIS, EPA reiterates that Executive Order 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, directs that each federal agency shall make it a high priority to identify and assess environmental health and safety risks that may disproportionately affect children, and shall ensure that its policies, programs, activities, and standards address these risks. It applies to all significant decisions made by federal agencies and is not specific to actions which are regulatory in nature, as suggested in the Response to Comments (p. 1168) in the Final EIS.[1] EPA supports Caltrans' commitment to diesel bus upgrades and heating, ventilation, and air conditioning upgrades to daycare centers, preschools, and schools within 1500 feet of the preferred alternative, as these measures will result in better air quality for children in these areas.

Recommendation:
In the ROD, describe the schedule of the VERA-funded 1) diesel bus upgrades to reduce particulate matter emissions and 2) heating, ventilation, and air conditioning upgrades to daycare centers, preschools, and schools within 1500 feet of the preferred alternative. Provide an anticipated schedule of implementation along with responsible parties.

1 U.S. EPA. August 28, 2012. Memorandum: Addressing Children's Health through Reviews Conducted Pursuant to the National Environmental Policy Act and Section 309 of the Clean Air Act. Available at http://www.epa.gov/compliance/resources/policies/nepa/NEPA-Children's-Health-Memo-August-2012.pdf.

Mobile Source Air Toxics

EPA appreciates the expanded discussion and analysis of the Mobile Source Air Toxics (MSATs) in the Final EIS, and we are supportive of Caltrans' commitment to monitor MSAT concentrations between opening and horizon years at the Bakersfield-California Avenue air monitoring station. We understand that Caltrans intends to provide the resulting air quality data to EPA.

The Final EIS also states that "neither the EPA nor California Air Resources Board (CARB) has established regulatory concentration targets for the seven relevant mobile source air toxics for use in the project development process. For the same reason, states are not required to achieve an identified level of air toxics in the ambient air or to identify air toxics reduction measures in the State Implementation Plan. Developing strategies for reducing mobile source air toxics is a cooperative effort between federal and local authorized agencies." Due to the unique characteristics of MSAT emissions compared to the emissions of air toxics from stationary sources, federal and state agencies have regulated these emissions in different ways. However, the absence of project development concentration targets for mobile sources should not imply that there are no benefits to better understanding possible adverse health impacts associated with human exposure to elevated MSATs. A comparison of total cancer and non-cancer risk from elevated exposure to air toxics between proposed alternatives would be very informative to decision-makers and the public.

EPA continues to note that the MSAT analysis in Tables 4-7 and 4-8 in the *Final Air Quality Study Report* (2014) showed decreases of air toxics for almost all Build Alternatives for 2018 and 2038 compared with baseline year 2008, and that the same analysis showed elevated MSATs for the Preferred Alternative for 2018, persisting into 2038, compared with the No Build Alternative. The increase in MSATs was shown across all seven indicators. While this analysis may not inform a decision in choosing between the Alternatives for this project, the analysis does forecast elevated air toxics in the vicinity of the Build Alternatives, where people and sensitive receptors live and work. In particular, Caltrans' MSAT analysis in the Air Quality Study Report indicated that concentrations of air toxics along Real Road, near part of the Preferred Alternative route, and near a community with environmental justice concerns (Census Tract 18.01), will increase in 2018 before declining at a horizon year of 2038. The forecasted increase indicated by this analysis would occur despite the shift of mobile-source emissions off local roads and onto the new facility, and despite the anticipated decline of per-vehicle emissions over time as a result of EPA regulations. EPA appreciates Caltrans' commitment to monitor MSATs between the opening and horizon years of the Centennial project from the California Avenue site to validate the modeling.

> *Recommendation:*
> In the ROD, confirm the commitment to monitor MSAT concentrations, and specify which air toxics will be monitored, along with the location of the monitors, the anticipated schedule and frequency of monitoring and the responsible party to complete the monitoring. Include copies of the air monitoring agreements between Caltrans and CARB as they pertain to these MSAT monitors. Commit to publicly disclose MSAT data from these monitors.

Assessing Project-specific Health Impacts from MSATs

As previously stated in our comments following our review of the Draft EIS and Administrative Draft Final EIS, EPA continues to dispute the characterization of uncertainty regarding MSATs and health impacts expressed in the Final EIS and suggests that Caltrans consider the following information in subsequent environmental analyses for projects with the potential to affect near-roadway health.

The Final EIS states (Vol 1, Chapter 3, Page 259) that the tools and techniques for assessing project-specific health impacts from MSATs are limited, that those tools that are available do not enable reliable predictions of project-specific health impacts of the emissions changes associated with the alternatives, and that there is too much uncertain science, as well as confounding factors, to make a complete determination of the MSAT health impacts of this project. EPA has provided Caltrans with links to data, methodology, and guidance available to assess health impacts and perform risk characterization for air toxics. Other resources include hotspot risk assessment guidance from the California Air Resource Board (CARB), and the methods used by the South Coast Air Quality Management District (SCAQMD) in their MATES IV study. The underlying scientific research that supports the assessment of MSAT (and other air toxic) risk is robust and widely used in many applications throughout the US by federal, state, and local agencies, as well as by academics and other relevant stakeholders. Further, whereas statements in the Final EIS describe uncertainty with the potential to lead to a "false positive" statement about health risk (i.e., an overestimation of the risk), missing from the discussion is a description of the sources of uncertainty that can lead to a chance of "false negative" statements about health risk (i.e., an underestimation of the risk).

Recommendation:
We recommend Caltrans correctly characterize the robustness of available technical tools to analyze the health risks associated with mobile source air toxics (MSATs) exposure, and suggest that future discussions addressing potential overestimation of risk also address potential underestimation of risk. EPA is available to meet with Caltrans to further discuss the available technical tools and literature regarding this area.

EPA further notes that the *Summary of Existing Credible Scientific Evidence Relevant to Evaluating the Impacts of Mobile Source Air Toxics* includes references to outdated analyses and could be expanded to reflect the most recent literature. For example, there is a new SCAQMD comprehensive study on air toxics that was released in 2015. EPA can provide information that demonstrates risk assessment for MSATs is not too uncertain to support decision making.

Recommendation:
For future analyses, we recommend Caltrans revise the information presented in this section to include the latest studies provided by EPA, including these two resources.

- CARB hot spot risk assessment guidance: http://www.arb.ca.gov/toxics/toxics.htm
- SCAQMD MATES IV study: http://www.aqmd.gov/home/library/air-quality-data-studies/health-studies/mates-iv

Thank you for the opportunity to comment on the Final EIS. When the ROD is finalized, please provide a copy to the address above (mail code: ENF 4-2). If you have any questions, please contact Zac Appleton, the lead reviewer for this project. You may reach Zac at 415-972-3321 or appleton.zac@epa.gov.

Sincerely,

for Connell Dunning, Supervisor
Environmental Review Section

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